CITY OF BIGGS

Agenda Item Staff Report
For Regular City Council Meeting
April 16, 2012 6:00 PM

DATE: April 9, 2012

TO: Honorable Mayor and Members of the City Council

FROM: Steve Speights, City Engineer

SUBJECT: Wastewater Treatment Plant Phase 1 Design (Action)

Background:

At its Feb. meeting the Council discussed various funding alternatives and directed staff to proceed with "Option 4". Option 4 included the following features:

- Application for two grant/ loans from USDA
- Application for loan from State Revolving Fund (SRF)
- Constructing the improvements in two phases
- Contribution of $200,000 from City funds (forgoing reimbursement of previous expenditures)
- A loan from the General Fund (Electric Utility) to the Sewer Improvement Fund for expenses to be incurred until permanent financing is in place (an estimated $500,000)
- An annual increase in monthly sewer charges beginning October 2012 and the last increase in October 2015.

Staff has prepared a Work Plan for the design of Phase 1(attached). The Work Plan includes a description of the improvements to be designed, the steps to be undertaken, a schedule for each step, and a Scope and Fee Estimate to accomplish the work. The Work Plan covers design work up to Council award of construction contract in the fall of 2013. The Scope and Fee estimate also include a subtask for pre-design of Phase 2 improvements so that the Phase 1 improvements do not conflict with future improvements. The design work is intended to parallel the grant / loan application processing, property acquisition, and environmental evaluation for Phase 2.
The environmental evaluation for the Phase 1 improvements was completed as part of the project for advanced on-site treatment, although the environmental process was not completed. We need

to prepare an addendum to the CEQA document and the Council will need to adopt a new CEQA finding. We do not think re-circulation will be necessary. Scott Friend is checking with USDA to see if a similar process is suitable for NEPA. USDA is conducting the NEPA evaluation. PMC has prepared a scope and fee for the CEQA and NEPA work necessary for Phase 1, and it is attached for council review.

The status of investigation of suitable properties for Phase 2 is subject of a separate agenda item to be considered in closed session.

Recommendation:

Authorize the City Administrator to approve a Bennett Task Order for the Scope and Fee Estimate included in the Work Plan for WWTP Phase 1 design.
Authorize the City Administrator to approve the PMC Task Order for the scope and fee for Phase 1 environmental work, attached to this staff report.

Fiscal Impact:

A $xxxxxx cost to the Sewer Improvement Fund over the next 12 months. The Electric Utility Reserve will need to loan the funds to the Sewer Improvement Fund until reimbursed by permanent financing through USDA and SRF.

Project Work Plan

Client:	City of Biggs
Consultant:	Bennett Engineering Services Inc
Project:	Waste Water Treatment Plant Phase 1
Date:	March 30, 2012

Project Description

Bennett Engineering Services (BEN|EN) understands that the City of Biggs desires to move forward with the design process to convert their existing Waste Water Treatment Plant (WWTP) from a surface water discharge facility to a land application discharge facility. To best serve the City the conversion will be designed in two phases. The Phase 1 portion will consist of plant upgrades and rehabilitation of existing facilities to ready the existing WWTP while the land acquisition and environmental processes are underway.

The Phase 1 design will consist of upgrading the influent pumping and headworks, covering the existing rock filters to reduce vector concerns, modernization of the chlorine delivery system, rehabilitate the chlorine contact basin, provide a technical memorandum describing the existing electrical system for use with new service requirements, provide a technical memorandum describing the existing and proposed standby power requirements, provide a technical memorandum describing the existing structures and upgrades the existing laboratory. As part of this project preliminary design for the phase 2 portion of the project will begin and includes preliminary storage pond design, preliminary land application design, preliminary tail water recirculation design, the preparation of a detailed project description, and environmental review assistance.

The upgrade to the influent pump station and headworks will consist of new wet well with submersible pumps, metering and distribution, and a grinder or screen to remove large material which currently enters the ponds and causes increased maintenance to the facility. Covering of the rock with media or material will assist in vector control and minimize the use of pesticides to control insects. By modernizing the chlorine delivery system chemical consumption will be reduced and will provide more reliable disinfection. Rehabilitation of the chlorine contact basin will repair broken and damaged surfacing and provide a location for the phase 2 discharge system. An evaluation of the existing electrical system is required to determine the condition of existing components and the feasibility of use for the proposed and future equipment. For the plant to remain operation during a power outages the WWTP will require back up power to effectively operate essential machinery. An evaluation of current, proposed and future power demands will be required for the determination of backup power. The existing structures are in need of maintenance. The exteriors and interiors of existing structures will be evaluated for items that are in need of repair or replacement either due to deferred maintenance or due to the proposed plant improvements.

BEN|EN will conduct bid assistance which will include advertising and bid solicitation, addenda, request for information during the bid process, analysis of bid results and a recommendation to the City for contractor selection.

The phase 2 preliminary design will be conducted to evaluate grading and drainage concepts, field piping configurations, equipment needs and electrical service requirements. The preliminary storage pond design will evaluate probable pond depths, preliminary earthwork quantities and levee design. Preliminary land application design will be conducted to determine methods of applying the stored waste water to the agricultural fields. Preliminary tail water recirculation concepts will be evaluated and analyzed for determination of equipment requirements and electrical demand. Through this evaluation and preliminary design a detailed project description will be prepared for use in environmental documents. This information will clearly define the proposed project and allow for review assistance with the required environmental documentation.

Project Goals

Phase 1

Project Delivery – Effectively deliver a clear, concise, complete and constructible project to the client on time and budget.

1) Coordinate and oversee the project team insuring each member is kept informed of information, responsibility, schedule and budget.
2) Coordinate with the City of Biggs Public Works committee and meet with City Council as required.
3) Provide the client with monthly status reports compiled from the project team's dialogue, effort and status. This provides a resource for ongoing project conversations that bring forth questions and concerns that have an effect on the project.
4) Conduct periodic quality control reviews during the design process and schedule mandatory quality control reviews on all designs and documents prior to submittal to the client.
5) To provide the team an opportunity to evaluate and garner hands on knowledge of the project it is vital to allow each member of the team to evaluate and become familiar with the project location and the elements for which each member will be responsible.

Topographic Surveying and Base Mapping – Gather reliable topographic data to accurately site proposed elements through design to avoid or resolve potential conflicts.

1) Collect existing elevation data and surface features in and around the existing water treatment facility.
2) Research parcel maps, as built drawings and utility information to identify easements, property lines, and existing infrastructure in and around the project site.
3) The topographic drawing will be created to accurately depict surface features and topography as well as diagrammatically illustrate subsurface features from other sources.

Existing Plant Retrofit and Rehabilitation Design – Produce constructible design solutions to retrofit and rehabilitate the existing WWTP for use in the Phase 2 land application. This will be demonstrated through technical narratives and construction drawings. Articles that will be addressed include the headworks, rock filters, chlorine delivery and contact chamber rehabilitation, electrical system and standby power rehabilitation and existing building and laboratory rehabilitation.

1) **Influent Pump Station and Headworks** - Evaluate and upgrade to the existing influent influent pump station and plant headworks. Design considerations will include upgrading the existing influent pump station, construction of a new pump station closer to the existing waste water treatment facility, construction of a screen or grinding system to remove large material prior to entering the existing ponds and a bypass system to be used during construction.

a) Technical Memorandum
b) Design PS&E

2) **Rock Filters** - Evaluate feasible systems to cover the existing rock filters to reduce vector concerns.
    a) Technical Memorandum
    b) Design PS&E
3) **Chlorine Delivery** - Evaluate feasible systems to improve effective chlorine delivery and rehabilitate the existing contact chamber.
    a) Technical Memorandum
    b) Design PS&E
4) **Electrical & Standby Power** - Evaluate the existing electrical and standby power systems. Determine requirements for future demands and equipment services. Rehabilitate, retro fit or construct adequate services to operate the proposed plant land application.
    a) Technical Memorandum
    b) Design PS&E
5) **Existing Structures** - Evaluate the condition of the existing buildings within the Wastewater Treatment Facility and laboratory.
    a) Technical Memorandum
    b) Design PS&E
6) **Dry Utility Coordination** - Evaluate the condition of the existing electrical and communication services. Design and coordinate extensions of infrastructure as required.
    c) Technical Memorandum
    d) Design PS&E

Bid Assistance – Assist the city of Biggs with Bid Assistance for the Phase 1 construction of the existing WWTP.

1) Assist the city with the Phase I bid coordination. This will include pre-bid meetings, responses to RFI's, bid tabulation and a narrative evaluating the bid results for staff and City Approval.
2) Bid Advertisement, addendums, and establishing a clearing house for bid copies and documents. (ie builders exchange, etc.)

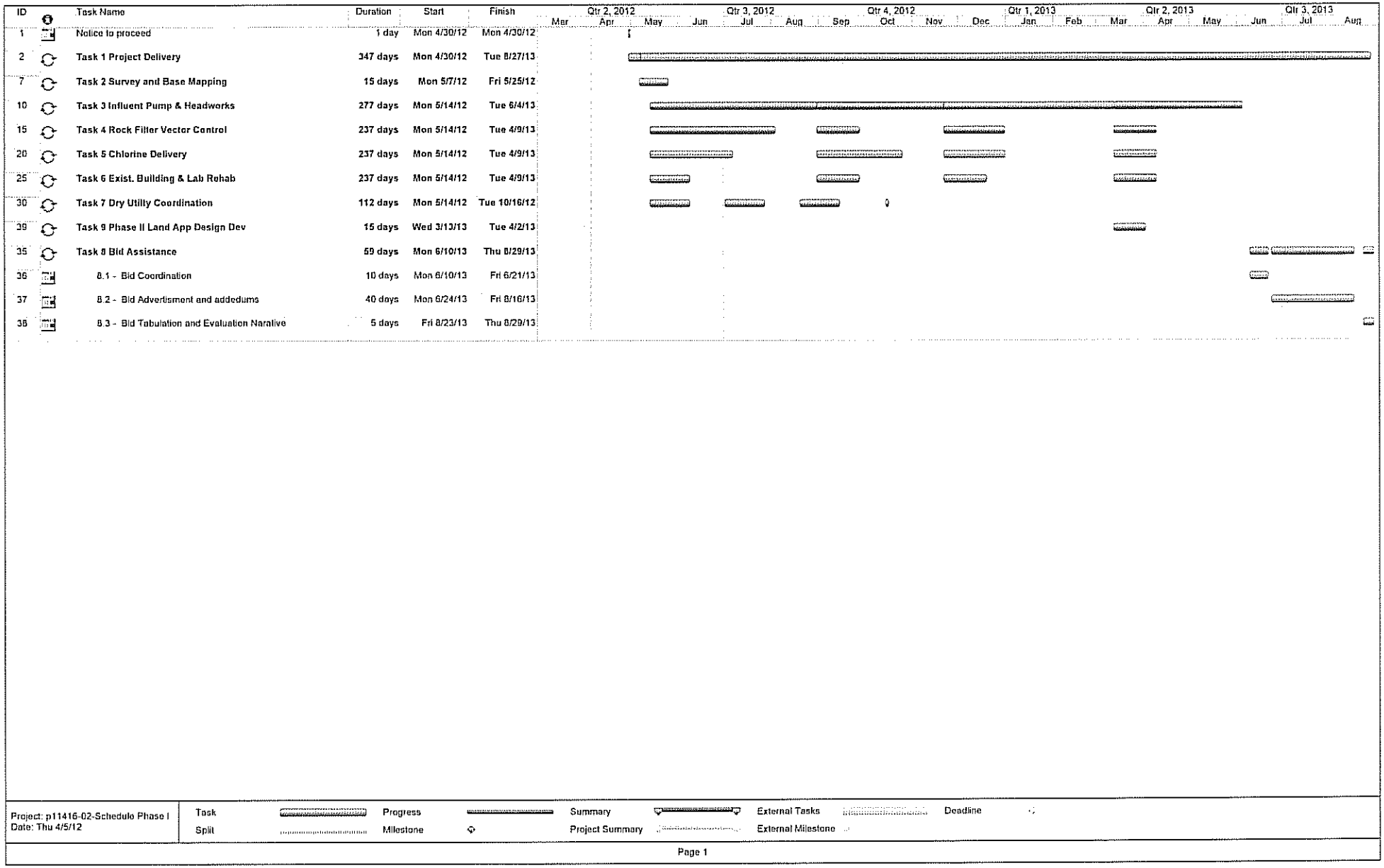
Phase 2

Land Application and Storage Design Development – The Phase 2 design development will create the base line considerations for establishing field piping layouts, general pump sizing requirements, and other facilities and equipment that will electrical services which will be included within the phase 1 rehabilitation.

1) Provide schematic design and section views of proposed ponds and field piping for distribution from the existing Wastewater Treatment Facility.
2) Provide schematic design of agricultural land to be used for land applied wastewater. This design will illustrate a grading concept and perimeter drainage.
3) Provide schematic design of field piping for recirculation of water from the land application.
4) Prepare a detailed project description for use in the environmental document preparation.
5) Review and assist the city and their consultant's with the environmental process as it relates to the existing and proposed facility.

Project Requirements

A. Effectively deliver a clear, concise, complete and constructible project to the client on time & budget.
B. Create a topographic for use as a base map that accurately depicts surface features and topography as well as diagrammatically illustrate subsurface features from other sources.
C. Create constructible design solutions for Phase 1 to retrofit and rehabilitate the existing WWTP for use in the Phase 2 land application, through technical narratives and 30%, 90% and final PS&E.
D. Provide assistance to the City of Biggs through the bid process and evaluation of bids.
E. Develop a design concept that includes opportunities for expanded uses that will be a part of the WWTP conversion to land application. This should include planning of needed infrastructure and equipment for the delivery of treated water to storage ponds, agricultural fields and a recirculation system.
F. Compliance with loan and grant requirements.



Project: p11416-02-Schedule Phase I
Date: Thu 4/5/12

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

EXHIBIT A: Scope of Services

To **AGREEMENT BETWEEN CLIENT AND CONSULTANT**

Client:	City of Biggs
Consultant:	Bennett Engineering Services Inc
Project:	Waste Water Treatment Plant Phase I
Date:	March 30, 2012

BEN|EN

Phase I

TASK 1. Project Delivery

Subtask 1.1. Meetings Team Coordination and Field Review

Setup and facilitate all Project team, interagency, field review, and other project related meetings. BEN|EN will prepare all meeting agendas and meeting minutes and distribute these to the Project Team. BEN|EN estimates six (6) meetings as part of this scope.

Subtask 1.2. Monthly Status Reports

Submit monthly invoices and status reports to the City.

Subtask 1.3. Quality Control Review

Quality Control and constructability reviews will be conducted by senior BEN|EN engineering staff, outside engineers and consultants prior to the 30%, 90%, and final PS&E submittals.

Subtask 1.4. Research Existing Facilities

The project team will review existing plans and research and inspect existing facilities to determine condition, location and operation. This information will be utilized to determine items that will require replacement or upgrade.

TASK 2. Phase I – Boundary, Topographic Surveying and Base Mapping

Subtask 2.1. Boundary and Topographic Surveying

BEN|EN will use field control and aerial photography to perform topographic survey of the project site. The topographic survey will include one foot contours with intermediate spot elevations. For horizontal control we propose using California State Plane coordinate system. BEN|EN will use USGS benchmarks for vertical control and NAD-83 coordinates for horizontal control.

Subtask 2.2. Research

BEN|EN will review agency/utility records to aid in the establishment of property lines, right-of-way lines and easements within the project area.

TASK 3. Influent Pump Station & Headworks

Evaluate and design an upgrade to the existing influent headworks. Design considerations will include upgrading the existing influent pump station, construction of a new pump station closer to the existing waste water treatment facility, construction of a screen or grinding system to remove large material prior to entering the existing ponds and a bypass system to be used during construction. A technical narrative will be submitted for approval prior to design.

TASK 4. Rock Filter Vector Control

Evaluate and design feasible systems to cover the existing rock filters to reduce vector concerns. A technical narrative will be submitted for approval prior to design.

TASK 5. Chlorine Delivery and Contact Chamber Rehabilitation

Evaluate and design a feasible system to improve effective chlorine delivery and rehabilitate the existing contact chamber. A technical narrative will be submitted for approval prior to design.

TASK 6. Existing Building and Laboratory Rehabilitation

Evaluate the condition of the existing buildings within the Wastewater Treatment Facility and laboratory and produce a design for rehabilitation based on the evaluation. A technical narrative will be submitted for approval prior to design.

TASK 7. Dry Utility Coordination

Evaluate the condition of the existing electrical and communication services. Design and coordinate extensions of infrastructure as required.

TASK 8. Bid Assistance

Subtask 8.1. Bid Coordination Assist the city with the Phase I bid coordination. This will include pre-bid meetings, responses to pre-bid RFI's, and any addenda required for bid purposes.

Subtask 8.2. Bid Advertisement, addendums, and establishing a clearing house for bid copies and documents. (ie builders exchange, etc.)

Subtask 8.3. Bid tabulation and a narrative evaluating the bid results for staff and City Approval.

Phase II

TASK 9. Land Application and Storage Design Development

Subtask 9.1. Preliminary Storage Pond Design

Provide schematic design and section views of proposed ponds and field piping for distribution from the existing Wastewater Treatment Facility.

Subtask 9.2. Preliminary Land Application Design

Provide schematic design of agricultural land to be used for land applied wastewater. This design will illustrate a grading concept and perimeter drainage.

Subtask 9.3. Preliminary Tail water Re-circulation Design

Provide schematic design of field piping for recirculation of water from the land application.

INITIALS:

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Subtask 9.4. Preparation of detailed project description.

The detailed project description will be for use in the environmental document preparation.

Subtask 9.5. Environmental Documentation Review Assistance

BEN|EN will review and assist the city and their consultant's with the environmental process as it relates to the existing and proposed facility.

DELIVERABLES:

- Technical narratives as described
- Design Plans at 30% submittal with outlined Specifications and Estimate
- Design Plans at 90% submittal with Specifications and Estimate
- Design Plans at Final submittal with Specifications and Estimate

INITIALS:

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EXHIBIT B: Fee Estimate

To AGREEMENT BETWEEN CLIENT AND CONSULTANT

Client: City of Biggs

Consultant: Bennett Engineering Services Inc

Project: Waste Water Treatment Plant Phase I

Date: April 6, 2012

Fee Estimate	Principal Engineer Bennett, D 165 $/hr		Project Manager III Rich, D 155 $/hr		Project Manager II Burton, K 150 $/hr		Engineer IV Speights, S 144 $/hr		Engineer II Lamb, S 128 $/hr		Engineer I Bennett, S 113 $/hr		Engineering Tech II Staff 95 $/hr		Administrative Staff 58 $/hr		BENJEN Subtotal		MISC. EXPENSES	Electrical Consultant	Structural Consultant	Surveying Consultant	TOTAL
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost		Contract	Contract	Contract	
Task 1 - Phase I - Project Delivery																							
1.1 - Meetings, Team Coordination and Field Review	2 hrs	$330	18 hrs	$2,790	hrs	$0	6 hrs	$864	32 hrs	$4,096	2 hrs	$226	hrs	$0	12 hrs	$672	72 hrs	$8,978	$450	$880	$220	$0	$10,528
1.2 - Monthly Status Reports	1 hrs	$165	8 hrs	$1,240	hrs	$0	1 hrs	$144	24 hrs	$3,072	2 hrs	$226	hrs	$0	12 hrs	$672	48 hrs	$5,519	$280	$120	$440	$0	$6,459
1.3 - Quality Control Review	1 hrs	$165	24 hrs	$3,720	hrs	$0	1 hrs	$144	8 hrs	$1,024	2 hrs	$226	hrs	$0	1 hrs	$56	37 hrs	$5,335	$270	$0	$0	$0	$5,605
1.4 - Research Existing Facilities	hrs	$0	6 hrs	$930	hrs	$0	2 hrs	$288	6 hrs	$768	6 hrs	$678	6 hrs	$570	1 hrs	$56	27 hrs	$3,290	$160	$0	$1,320	$0	$4,770
Subtotal	4 hrs	$660	56 hrs	$8,680	hrs	$0	10 hrs	$1,440	70 hrs	$8,960	12 hrs	$1,356	6 hrs	$570	26 hrs	$1,456	184 hrs	$23,122	$1,160	$1,100	$1,980	$0	$27,362
Task 2 - Phase I - Topographic Surveying and Base Mapping																							
2.1 - Boundary and Topographic Surveying	hrs	$0	hrs	$0	hrs	$0	hrs	$0	2 hrs	$256	2 hrs	$226	16 hrs	$1,520	hrs	$0	20 hrs	$2,002	$100	$0	$0	$11,000	$13,102
2.2 - Research	hrs	$0	hrs	$0	hrs	$0	hrs	$0	hrs	$0	hrs	$0	hrs	$0	hrs	$0	hrs	$0	$0	$0	$0	$2,200	$2,200
Subtotal	hrs	$0	hrs	$0	hrs	$0	hrs	$0	2 hrs	$256	2 hrs	$226	16 hrs	$1,520	hrs	$0	20 hrs	$2,002	$100	$0	$0	$13,200	$15,302
Task 3 - Headworks																							
3.1 - Technical Memorandum	1 hrs	$165	24 hrs	$3,720	hrs	$0	hrs	$0	12 hrs	$1,536	24 hrs	$2,712	hrs	$0	1 hrs	$56	62 hrs	$8,189	$410	$1,320	$880	$0	$10,799
3.2 - 30% PS&E	1 hrs	$165	24 hrs	$3,720	4 hrs	$600	hrs	$0	24 hrs	$3,072	40 hrs	$4,520	40 hrs	$3,800	hrs	$0	133 hrs	$15,877	$790	$1,760	$1,320	$0	$19,747
3.3 - 90% PS&E	1 hrs	$165	24 hrs	$3,720	1 hrs	$150	hrs	$0	12 hrs	$1,536	8 hrs	$904	36 hrs	$3,420	hrs	$0	82 hrs	$9,895	$490	$1,760	$1,320	$0	$13,465
3.4 - Final PS&E	1 hrs	$165	24 hrs	$3,720	1 hrs	$150	hrs	$0	16 hrs	$2,048	12 hrs	$1,356	26 hrs	$2,470	hrs	$0	80 hrs	$9,909	$500	$2,640	$1,320	$0	$14,369
Subtotal	4 hrs	$660	96 hrs	$14,880	6 hrs	$900	hrs	$0	64 hrs	$8,192	84 hrs	$9,492	102 hrs	$9,890	1 hrs	$56	357 hrs	$43,870	$2,190	$7,480	$4,840	$0	$58,380
Task 4 - Rack Filter Vector Control																							
4.1 - Technical Memorandum	2 hrs	$330	2 hrs	$310	hrs	$0	6 hrs	$864	4 hrs	$512	8 hrs	$904	1 hrs	$95	1 hrs	$56	24 hrs	$3,071	$150	$0	$0	$0	$3,221
4.2 - 30% PS&E	1 hrs	$165	2 hrs	$310	hrs	$0	1 hrs	$144	8 hrs	$1,024	4 hrs	$452	24 hrs	$2,280	hrs	$0	40 hrs	$4,375	$220	$0	$0	$0	$4,595
4.3 - 90% PS&E	1 hrs	$165	2 hrs	$310	hrs	$0	1 hrs	$144	8 hrs	$1,024	4 hrs	$452	24 hrs	$2,280	hrs	$0	40 hrs	$4,375	$220	$0	$0	$0	$4,595
4.4 - Final PS&E	2 hrs	$330	2 hrs	$310	hrs	$0	1 hrs	$144	8 hrs	$1,024	4 hrs	$452	16 hrs	$1,520	hrs	$0	53 hrs	$3,780	$190	$0	$0	$0	$3,970
Subtotal	6 hrs	$990	8 hrs	$1,240	hrs	$0	9 hrs	$1,296	28 hrs	$3,584	20 hrs	$2,260	65 hrs	$6,175	1 hrs	$56	157 hrs	$15,601	$780	$0	$0	$0	$16,381
Task 5 - Chlorine Delivery																							
5.1 - Technical Memorandum	1 hrs	$165	6 hrs	$930	hrs	$0	hrs	$0	2 hrs	$256	8 hrs	$904	1 hrs	$95	1 hrs	$56	19 hrs	$2,406	$120	$1,320	$880	$0	$4,726
5.2 - 30% PS&E	2 hrs	$165	10 hrs	$1,550	hrs	$0	hrs	$0	2 hrs	$256	12 hrs	$1,356	24 hrs	$2,280	hrs	$0	49 hrs	$5,607	$280	$1,760	$1,320	$0	$8,967
5.3 - 90% PS&E	1 hrs	$165	10 hrs	$1,550	hrs	$0	hrs	$0	2 hrs	$256	12 hrs	$1,356	16 hrs	$1,520	hrs	$0	41 hrs	$4,847	$240	$1,760	$1,320	$0	$8,167
5.4 - Final PS&E	1 hrs	$165	8 hrs	$1,240	hrs	$0	hrs	$0	3 hrs	$384	6 hrs	$678	12 hrs	$1,140	hrs	$0	30 hrs	$3,607	$180	$1,760	$1,320	$0	$6,867
Subtotal	4 hrs	$660	34 hrs	$5,270	hrs	$0	hrs	$0	9 hrs	$1,152	38 hrs	$4,294	53 hrs	$5,035	1 hrs	$56	139 hrs	$16,467	$820	$6,600	$4,840	$0	$28,727
Task 6 - Existing Building & Lab Rehabilitation																							
6.1 - Technical Memorandum	2 hrs	$330	8 hrs	$1,240	hrs	$0	6 hrs	$864	2 hrs	$256	4 hrs	$452	hrs	$0	1 hrs	$56	23 hrs	$3,198	$160	$2,200	$2,750	$0	$8,308
6.2 - 30% PS&E	1 hrs	$165	2 hrs	$310	hrs	$0	1 hrs	$144	2 hrs	$256	6 hrs	$678	8 hrs	$760	hrs	$0	20 hrs	$2,313	$170	$2,200	$1,320	$0	$5,953
6.3 - 90% PS&E	1 hrs	$165	1 hrs	$155	hrs	$0	1 hrs	$144	2 hrs	$256	12 hrs	$1,356	8 hrs	$760	hrs	$0	25 hrs	$2,836	$140	$2,200	$1,320	$0	$6,496
6.4 - Final PS&E	1 hrs	$165	1 hrs	$155	hrs	$0	1 hrs	$144	2 hrs	$256	12 hrs	$1,356	4 hrs	$380	hrs	$0	21 hrs	$2,456	$120	$2,200	$1,320	$0	$6,096
Subtotal	5 hrs	$825	12 hrs	$1,860	hrs	$0	9 hrs	$1,296	8 hrs	$1,024	34 hrs	$3,842	20 hrs	$1,900	1 hrs	$56	89 hrs	$10,803	$540	$8,800	$6,710	$0	$26,853
Task 7 - Dry Utility Coordination																							
7.1 - Technical Memorandum	hrs	$0	2 hrs	$310	hrs	$0	1 hrs	$144	1 hrs	$128	6 hrs	$678	hrs	$0	1 hrs	$56	11 hrs	$1,316	$70	$880	$0	$0	$2,266
7.2 - 30% PS&E	hrs	$0	1 hrs	$155	hrs	$0	1 hrs	$144	2 hrs	$256	10 hrs	$1,130	4 hrs	$380	hrs	$0	18 hrs	$2,065	$100	$880	$0	$0	$3,045
7.3 - 90% PS&E	hrs	$0	1 hrs	$155	hrs	$0	1 hrs	$144	2 hrs	$256	12 hrs	$1,356	4 hrs	$380	hrs	$0	20 hrs	$2,291	$110	$880	$0	$0	$3,281
7.4 - Final PS&E	1 hrs	$165	1 hrs	$155	hrs	$0	1 hrs	$144	2 hrs	$256	12 hrs	$1,356	4 hrs	$380	hrs	$0	21 hrs	$2,456	$120	$880	$0	$0	$3,456
Subtotal	1 hrs	$165	5 hrs	$775	hrs	$0	4 hrs	$576	7 hrs	$896	40 hrs	$4,520	12 hrs	$1,140	1 hrs	$56	70 hrs	$8,128	$400	$3,520	$0	$0	$12,048
Task 8 - Bid Assistance																							
8.1 - Bid Coordination	1 hrs	$165	2 hrs	$310	hrs	$0	12 hrs	$1,728	12 hrs	$1,536	8 hrs	$904	2 hrs	$190	4 hrs	$224	41 hrs	$5,057	$250	$440	$440	$0	$6,187
8.2 - Bid Advertisment and addedums	1 hrs	$165	2 hrs	$310	hrs	$0	1 hrs	$144	8 hrs	$1,024	8 hrs	$904	2 hrs	$190	4 hrs	$224	26 hrs	$2,961	$150	$0	$0	$0	$3,111
8.3 - Bid Tabulation and Evaluation Narative	1 hrs	$165	2 hrs	$310	hrs	$0	2 hrs	$288	8 hrs	$1,024	8 hrs	$904	2 hrs	$190	4 hrs	$224	27 hrs	$3,105	$160	$0	$0	$0	$3,265
Subtotal	3 hrs	$495	6 hrs	$930	hrs	$0	15 hrs	$2,160	28 hrs	$3,584	24 hrs	$2,712	6 hrs	$570	12 hrs	$672	94 hrs	$11,123	$560	$440	$440	$0	$12,563
Task 9 - Phase II - Land Application & Storage Design Development																							
9.1 - Preliminary Storage Pond Design	hrs	$0	28 hrs	$4,340	hrs	$0	1 hrs	$144	32 hrs	$4,096	48 hrs	$5,424	40 hrs	$3,800	hrs	$0	149 hrs	$17,804	$2,890	$440	$0	$0	$21,134
9.2 - Preliminary Land Application Design	hrs	$0	28 hrs	$4,340	2 hrs	$300	1 hrs	$144	32 hrs	$4,096	40 hrs	$4,520	40 hrs	$3,800	hrs	$0	143 hrs	$17,200	$860	$880	$0	$0	$18,940
9.3 - Preliminary Tail Water Re-circulation Design	1 hrs	$165	22 hrs	$3,410	2 hrs	$300	1 hrs	$144	32 hrs	$4,096	40 hrs	$4,520	40 hrs	$3,800	hrs	$0	138 hrs	$16,435	$830	$1,320	$0	$0	$18,575
9.4 - Preparation of Detailed Project Description	2 hrs	$330	28 hrs	$4,340	hrs	$0	6 hrs	$864	20 hrs	$2,560	16 hrs	$1,808	hrs	$0	3 hrs	$168	75 hrs	$10,070	$500	$0	$0	$0	$10,570
9.5 - Environmental Documentation Review Assistance	2 hrs	$330	28 hrs	$4,340	hrs	$0	12 hrs	$1,728	12 hrs	$1,536	16 hrs	$1,808	hrs	$0	3 hrs	$168	73 hrs	$9,910	$500	$0	$0	$0	$10,410
Subtotal	5 hrs	$825	134 hrs	$20,770	4 hrs	$600	21 hrs	$3,024	128 hrs	$16,384	160 hrs	$18,080	120 hrs	$11,400	6 hrs	$336	578 hrs	$71,419	$5,570	$2,640	$0	$0	
PROJECT TOTAL	32 hrs	$5,280	351 hrs	$54,405	10 hrs	$1,500	68 hrs	$9,792	344 hrs	$44,032	414 hrs	$46,782	400 hrs	$38,000	49 hrs	$2,744	1668 hrs	$202,535	$12,120	$30,580	$18,810	$13,200	

INITIALS: